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10/762,051

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Matti Parnanen

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EXAMINER

NGUYEN, PHILLIP H

ART UNIT

PAPER NUMBER

2191

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/762,051

Applicant(s)

PARNANEN ET AL.

Examiner

Phillip H. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 20050815.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed on December 14, 2006.

Claims 1-23 are remain pending and have been considered below.

2. Claims 9-14 and 21 are currently being amended.

Drawings

3. The amendment filed on December 14, 2006 overcomes the objection to the drawings of the previous action. Therefore, the objection is withdrawn.

Claim Rejections - 35 USC § 101

4. The amendment filed on December 14, 2006 overcomes the 101 rejection to claims 21-23 of the previous action. Therefore, the rejection is withdrawn for claims 21-23.

Response to Arguments

5. Applicant's arguments with respect to claims 1-3 and 5-25 have been considered but are moot in view of the new ground(s) of rejection.

Note

6. Regarding the claims recite the phrase "for" in the preamble or the body of the claims. It indicates intended use and as such does not carry any patentable weight. The limitations following the phrase "for" describe only intended use but not necessarily

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required functionality of the claim. Applicant is required to amend the claims so that the claim limitations are recited in a definite form. For example, claim 1 recites "for adding" should be changed to "to add" or "that adds".

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claim 1, the claimed language raises a question as to whether the outcome of this claim would accomplished a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. For instance, "providing the feature if the provider is identified..." is lacking of concreteness because we do not know whether the feature is provided to consumer application and utilizing the feature or not. Therefore, the outcome is not concrete, useful, and tangible. Claims 2-7 directly depend on claim 1 and therefore have been addressed in connection with the rejection set forth to claim 1.

Regarding claim 8, recites a device but it appears reasonable to interpret this device by one of ordinary skill in the art as software, per se. Applicant's specification provides no explicit and deliberate definition of the components ("consumer application", "provider application", "application interworking framework") that make up the device other than they could be software components, which are directed to functional

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descriptive material, per se, and are therefore non-statutory. Additional item to consider as to whether the claim is directed to an abstract idea that is not tied to a technological art, environment or machine which would accomplished a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. For instance, "an application interworking framework that provides an interface for the said consumer application and the said provider application such that the said feature interest is matched with one of the features available from the said provider application" does not produce a concrete, useful, and tangible result because the outcome is not realized as installing, utilizing, executing or any other tangible output that would provide a utility. Therefore, the claim is non-statutory.

Claims 9-16 directly or indirectly depend on claim 8 and therefore have been addressed in connection with the rejection set forth to claim 8.

Regarding claims 17, recites a system but it appears reasonable to interpret this system by one of ordinary skill in the art as software, per se. Applicant's specification provides no explicit and deliberate definition of the components ("consumer application", "provider application", "application interworking framework") that make up the system other than they could be software components, which are directed to functional descriptive material, per se, and are therefore non-statutory. Claims 18-23 directly or indirectly depend on claim 17 and have been addressed in connection with the rejection set forth to claim 17.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, recites "providing the feature, if the provider is identified, ..." is unclear to Examiner as to whether the utilizing step is still performing when the provider is not identified.

Regarding claim 11, recites "new consumer application integrates into the device as if part of an original group of software applications for the device" is unclear. It raises a question whether the new consumer application integrates into the device if it is not part of an original group of software applications.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-3, 5-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mehta et al. (International Application Publication No.: WO 02/44892 A2), in view of

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Rothman et al. (United States Patent Application Publication No.: US 2004/0230963

A1).

As per claim 1:

Mehta discloses a method for adding computer software features dynamically to a software application by establishing a framework for a application programming interface (API) that adds a feature to an application, the method comprising:

- requesting a feature matching a consumer interest of a consumer application (**"request downloads of content and application discovery...a list of content that can be downloaded that match criteria that are designated by the subscriber"** page 2, line 16-18);
- using the consumer interest and a feature capability to identify a provider (**"the MAS provides the ability to submit new content, request downloads of content and application discovery"** page 2, line 15-16, **this means, MAS is a provider and has been identified by subscriber**);
- providing the feature, if the provider is identified, to the consumer application (**"MAS returns a list of content based upon subscriber preferences"** page 2, line 19); and
- utilizing the feature at the consumer application (**"an upgrade or a more recent version of software that will be run on the subscriber device"** page 14, line 5-6, **utilizing is running or executing application**).

Mehta does not explicitly disclose the use of framework.

However, Rothman discloses an analogous method using framework **“to provide a standardized mechanism to enable system and ad-in card firmware to be updated in an OS agnostic manner”** paragraph 0016, line 2-4).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify Mehta's approach to use Rothman's framework for adding features to software application. One of ordinary skill in the art would have been motivated to modify Mehta's approach to use framework because **“framework API provides an abstracted interface that supports firmware updates without requiring intimate knowledge of the firmware being updated”** (paragraph 0016, line 13-15); **“enables firmware, in the form of firmware modules and drivers, to be loaded from a variety of different resources, including primary and secondary flash devices, option ROMs, various persistent storage devices, and even over computer network”** (paragraph 0017, line 12-17).

As per claim 2:

Mehta and Rothman disclose the method as in claim 1 above; and Rothman further discloses:

- using generic parameters in application interworking framework application programming interface (APIs) (**“variables are intended for use as a means to store data that passed between the EFI environment implemented in the platform and EFI OS loaders...”** paragraph 0042, line 4-7).

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As per claim 3:

Mehta and Rothman disclose the method as in claim 1 above; and Rothman further discloses:

- wherein the application interworking framework interfaces the consumer application with the feature provider ("**EFI is a public industry specification that describes an abstract programmatic interface between platform firmware and shrink-wrap operation systems or other custom application environments**" paragraph 0017, line 6-8).

As per claim 5:

Mehta and Rothman disclose the method as in claim 1 above; and Mehta further discloses:

- adding a feature user interface element along with the feature ("**refer to content in the form of applications and resources...user interface screen displays, code flows, menu**" page 10, line 22).

As per claim 6:

Mehta and Rothman disclose the method as in claim 5 above; and Mehta further discloses:

- wherein the feature user interface element comprises menu commands and a setting page or other user interface elements ("**refer to content in the form of application and resources... also menu options**" page 10, line 23).

As per claim 7:

Mehta and Rothman disclose the method as in claim 5 above; Rothman further discloses:

- wherein the application interworking framework implements two application program interfaces (APIs), including a consumer API and a set of provider APIs, wherein the provider APIs match the desired user interface elements (**"A protocol typically contains a set of APIs" paragraph 0022, the idea is using multiple APIs**).

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As per claim 8:

Mehta discloses a device that adds features dynamically to a software application such that a feature provided by a software program can be added to a software platform program for the device, the device comprising:

- a consumer application ("**MAS 105**" page 11, line 4) that publishes a feature interest indicating what features the said consumer application desires to have ("**the applications are then verified, published, and provisioned to the subscriber devices 101 by the MAS 105 when requested**" page 11, line 5-6); and
- at least one provider application that has at least one feature available ("**content providers 106 provide applications to the MAS 105, through or by permission of the carrier service 104**" page 11, line 4).

Mehta does not explicitly disclose:

- an application interworking framework that provides an interface for the said consumer application and the said provider application such that the said feature interest is matched with one of the features available from the said provider application.

However, Rothman discloses an analogous method using framework "**to provide a standardized mechanism to enable system and ad-in card firmware to be updated in an OS agnostic manner**" paragraph 0016, line 2-4).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify Mehta's approach to use Rothman's

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framework for adding features to software application. One of ordinary skill in the art would have been motivated to modify Mehta's approach to use framework because **"framework API provides an abstracted interface that supports firmware updates without requiring intimate knowledge of the firmware being updated"** (paragraph 0016, line 13-15); **"enables firmware, in the form of firmware modules and drivers, to be loaded from a variety of different resources, including primary and secondary flash devices, option ROMs, various persistent storage devices, and even over computer network"** (paragraph 0017, line 12-17).

As per claim 9:

Mehta and Rothman disclose the device as in claim 15 above; and Mehta further discloses:

- wherein the new consumer application is an application provided by a terminal manufacturer (**"The applications are stored locally in a carrier's application data repository (which may be located in the MAS or at the carrier's premises"** page 14, line 6-8).

As per claim 10:

Mehta and Rothman disclose the device as in claim 15 above; and Mehta further discloses:

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- wherein the new consumer application is an application provided by a third party to a user of the device ("**the application are stored in trusted third party servers**" page 14, liner 8).

As per claim 11:

Mehta and Rothman disclose the device as in claim 15 above; and Mehta further discloses:

- wherein the new consumer application integrates into the device as if part of an original group of software applications for the device ("**an upgrade or a more recent version of software that will run on the subscriber device**" page 14, line 16-17).

As per claim 12:

Mehta and Rothman disclose the device as in claim 15 above; and Rothman further discloses:

- wherein generic parameters are used in application interworking framework application programming interface (APIs) ("**variables are intended for use as a means to store data that passed between the EFI environment implemented in the platform and EFI OS loaders...**" paragraph 0042, line 4-7).

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As per claim 13:

Mehta and Rothman disclose the device as in claim 15 above; and Mehta further discloses:

- wherein the feature interest of the new consumer application comprises menu options not on the device before introduction of the new consumer application to the device ("**submit new content, request downloads of content and application discovery**" page 2, line 15-16; "**content in the form of applications and resources... menu options**" page 10, line 23).

As per claim 14:

Mehta and Rothman disclose the device as in claim 15 above; and Mehta further discloses:

- wherein user interface elements corresponding to the matched features are placed in the interest placeholders ("**data repository**" page 14, line 7).

As per claim 15:

Mehta and Rothman disclose the device as in claim 8 above; and Rothman further discloses:

- wherein the consumer application is a new consumer application ("**the MAS provides the ability to submit new content**" page 2, line 15).

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As per claim 16:

Mehta and Rothman disclose the device as in claim 8 above; and Rothman further discloses:

- wherein the at least one feature available is a user interface feature based on the feature interest ("**user interface screen display**" page 10, line 23).

As per claim 17:

Mehta discloses a system for adding features dynamically to a software application, the system comprising:

- a consumer application that publishes a feature interest ("**the applications are then verified, published, and provisioned to the subscriber devices 101 by the MAS 105 when requested**" page 11, line 5-6) and identifies user interface resources needed based on the feature interest ("**verifying that the device can support the API and resource requirements of the content**" page 2, line 24-15);
- a provider application that publishes a provider capability ("**content providers 106 provide applications to the MAS 105, through or by permission of the carrier service 104**" page 11, line 4) and identifies user interfaces resources available for a feature ("**verifying that the device can support the API and resource requirements of the content**" page 2, line 24-15); and

Mehta does not explicitly disclose:

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- an application interworking framework that provides an interface for the consumer application and the provider application such that the feature interest is matched with the provider capability and the user interface elements are added from the provider application to the consumer application

However, Rothman discloses an analogous method using framework **"to provide a standardized mechanism to enable system and ad-in card firmware to be updated in an OS agnostic manner"** paragraph 0016, line 2-4).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify Mehta's approach to use Rothman's framework for adding features to software application. One of ordinary skill in the art would have been motivated to modify Mehta's approach to use framework because **"framework API provides an abstracted interface that supports firmware updates without requiring intimate knowledge of the firmware being updated"** (paragraph 0016, line 13-15); **"enables firmware, in the form of firmware modules and drivers, to be loaded from a variety of different resources, including primary and secondary flash devices, option ROMs, various persistent storage devices, and even over computer network"** (paragraph 0017, line 12-17).

As per claim 18:

Mehta and Rothman disclose the system as in claim 17 above; and further disclose:

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- wherein the consumer application interfaces (**"the MAS supports an extensible command processing engine and supports the direct invocation of the various handlers, modules, and other structures that are components of the MAS... an application programming interface (API)"** see Mehta page 14, line 18-21) with the application interworking framework using an application programming interface (API) (**"framework API"** see Rothman paragraph 0016, line 13).

As per claim 19:

Mehta and Rothman disclose the system as in claim 17 above; and Mehta further discloses:

- wherein the consumer application obtains user interface elements from other providers (**"the downloaded application may be for example, a new"** page 14, line 15).

As per claim 20:

Mehta and Rothman disclose the system as in claim 17 above; and Mehta further discloses:

- wherein the client device is a mobile telephone (**"the subscriber devices 101 comprise ...such as wireless handsets, phones, ..."** page 11, line 18-21).

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As per claim 21:

Mehta discloses a computer program product, embodied on a computer readable medium, comprising:

- computer code configured to:
 - o provide a consumer application interest resource for a consumer application specifying at least one user interface element (**"the applications are then verified, published, and provisioned to the subscriber devices 101 by the MAS 105 when requested"** page 11, line 5-6);
 - o store user interface element corresponding to the consumer application interest resource in a file (**"the application are stored locally in carrier's application data repository"** page 14, line 6-7); and
 - o add said user interface element to the consumer user interface (**"the downloaded application may be an upgrade or a more recent version of software that will run on the subscriber device"** page 14, line 15-16).

Mehta does not explicitly disclose:

- o communicate said user interface element to an application interworking framework; and

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However, Rothman discloses an analogous method using framework **"to provide a standardized mechanism to enable system and ad-in card firmware to be updated in an OS agnostic manner"** paragraph 0016, line 2-4).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify Mehta's approach to use Rothman's framework for adding features to software application. One of ordinary skill in the art would have been motivated to modify Mehta's approach to use framework because **"framework API provides an abstracted interface that supports firmware updates without requiring intimate knowledge of the firmware being updated"** (paragraph 0016, line 13-15); **"enables firmware, in the form of firmware modules and drivers, to be loaded from a variety of different resources, including primary and secondary flash devices, option ROMs, various persistent storage devices, and even over computer network"** (paragraph 0017, line 12-17).

As per claim 22:

Mehta and Rothman disclose the computer program product as in claim 21 above; and Rothman further discloses:

- computer code to generate a class of generic parameters (**"There are two subclasses of DXE drivers"** paragraph 0028, line 1).

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As per claim 23:

Mehta and Rothman disclose the computer program product as in claim 21 above; and Rothman further discloses:

- computer code to pass arguments within the application interworking framework ("**variables are intended for use as a means to store data that is passed between the EFI environment implemented in the platform**" paragraph 0042).

14. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mehta et al. (International Application Publication No.: WO 02/44892 A2) and Rothman et al. (United States Patent Application Publication No.: US 2004/0230963 A1) as applied to claim 1 above, and further in view of Chandrasekaran et al. (United States Patent No.: US 6,335,972 B1).

As per claim 4:

Mehta and Rothman disclose the method as in claim 1 above, but does not explicitly disclose:

- wherein the application interworking framework interfaces the consumer application with the feature provider using dynamic link library (DLL) function call.

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However, Chandrasekaran discloses the use of dynamic link library (DLL) function call ("**the SKMF and a set of service providers may be bundled into a dynamic link library (DLL) with well-defined exported interface**" Col 24, line 35-36).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify Mehta's approach to make use of dynamic link library (DLL). One of ordinary skill in the art would have been motivated to use dynamic link library to access function and program dynamically.

Conclusion

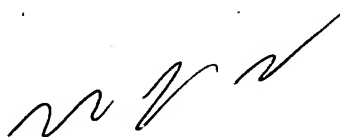
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip H. Nguyen whose telephone number is (571) 270-1070. The examiner can normally be reached on Monday - Thursday 10:00 AM - 3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PN
02/21/2007



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